



Gram-negative rod

oxidase+

nitrate+

*Pseudomonas aeruginosa*

nitrate-

*Alcaligenes faecalis*

Other tests for oxidase positives:

Glucose-  
Motility+  
H<sub>2</sub>S-  
MR-  
Mannitol-

Lactose-  
DNase-  
Citrate+  
VP+  
Indole-

oxidase-

Lactose +

Indole+

*Escherichia coli*

MR+ VP-  
Citrate-  
Glucose+  
with gas

Indole-

*Klebsiella pneumoniae*

H<sub>2</sub>S-  
citrate+  
motility-  
MR- VP+  
Glucose+  
with gas

Lactose -

H<sub>2</sub>S+

Urease+

*Proteus mirabilis*

Citrate+  
Motility+  
MR+ VP-  
Glucose+  
with gas

Urease-

*Salmonella enteritidis*

Citrate+  
Motility+  
MR+ VP-  
Glucose+  
with gas

H<sub>2</sub>S-

*Shigella dysenteriae*

motility-  
citrate-  
MR+ VP-  
Glucose+  
w/o gas



